NAIP 2007 - 1m (RGBIR) - Arizona

Metadata also available as

Metadata:

- Identification Information
- Data Quality Information
- Spatial Data Organization Information
- Spatial Reference Information
- Entity and Attribute Information
- Distribution Information
- Metadata Reference Information

Identification_Information:

Citation:

Citation Information:

Originator: USDA-FSA-APFO Aerial Photography Field Office Publication_Date: 20080109 Title: NAIP 2007 - 1m (RGBIR) - Arizona Geospatial_Data_Presentation_Form: vector digital data Publication_Information:

Publication_Place: Salt Lake City, Utah Publisher: USDA-FSA-APFO Aerial Photography Field Office

Online Linkage:

Description:

Abstract:

This data set contains imagery from the National Agriculture Imagery Program (NAIP). NAIP acquires digital ortho imagery during the agricultural growing seasons in the continental U.S. A primary goal of the NAIP program is to enable availability of of ortho imagery within one year of acquisition. NAIP provides four main products: 1 meter ground sample distance (GSD) ortho imagery rectified to a horizontal accuracy of within +/- 5 meters of reference digital ortho quarter quads (DOQQ's) from the National Digital Ortho Program (NDOP); 2 meter GSD ortho imagery rectified to within +/- 10 meters of reference DOQQs; 1 meter GSD ortho imagery rectified to within +/- 6 meters to true ground; and, 2 meter GSD ortho imagery rectified to within +/- 10 meters to true ground. The tiling format of NAIP imagery is based on a 3.75' x 3.75' quarter quadrangle with a 300 meter buffer on all four sides. NAIP quarter quads are formatted to the UTM coordinate system using NAD83. NAIP imagery may contain as much as 10% cloud cover per tile.

Purpose:

NAIP imagery is available for distribution within 60 days of the end of a flying season and is intended to provide current information of agricultural conditions in support of USDA farm programs. For USDA Farm Service Agency, the 1 meter GSD product provides an ortho image base for Common Land Unit boundaries and other data sets. The 1 meter NAIP imagery is generally acquired in projects covering full states in cooperation with state government and other federal agencies who use the imagery for a variety of purposes including land use planning and natural resource assessment. With an annual cycle, NAIP is also used for disaster response often providing the most current pre-event imagery. While suitable for a variety of uses the 2 meter GSD NAIP imagery is primarily intended to assess crop condition and compliance to USDA farm program conditions. The 2 meter imagery is generally acquired only for agricultural areas within state projects.

Time_Period_of_Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2007 June/July

Currentness_Reference: ground condition

Status:

Progress: Complete

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Maintenance_and_Update_Frequency: Irregular
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Spatial_Domain:

Bounding Coordinates:

West_Bounding_Coordinate: -115.096023 East_Bounding_Coordinate: -108.858762 North_Bounding_Coordinate: 37.102058 South_Bounding_Coordinate: 31.255494

Keywords:

Theme:

Theme Keyword: farming

Theme Keyword: Digital Ortho rectified Image

Theme Keyword: Ortho Rectification

Theme Keyword: Quarter Quadrangle Centered

Theme Keyword: NAIP

Theme_Keyword: Aerial Compliance Theme_Keyword: Compliance

Place:

Place_Keyword_Thesaurus: Geographic Names Information System Place_Keyword: Arizona Place_Keyword: USA

Access Constraints: There are no limitations for access.

Use_Constraints:

Imagery may be replaced to address defects found in a small number of products through quality assurance processes. Imagery containing defects that require the acquisition of new imagery, such as excessive cloud cover, specular reflectance, etc., will not be replaced within a NAIP project year.

Point of Contact:

Contact Information:

Contact Organization Primary:

Contact_Organization: Aerial Photography Field Office (APFO)

Contact_Address:

Address_Type: mailing and physical address

Address: 2222 West 2300 South

City: Salt Lake City State_or_Province: Utah Postal_Code: 84119-2020

Country: USA

Contact_Voice_Telephone: 801-844-2922 Contact_Facsimile_Telephone: 801-956-3653

Contact Electronic Mail Address: apfo.sales@slc.usda.gov

Browse Graphic:

Browse_Graphic_File_Name: None Browse_Graphic_File_Description: None Browse_Graphic_File_Type: None

Native_Data_Set_Environment:

Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 3; ESRI ArcCatalog 9.2.6.1500

Data_Quality_Information:

Logical_Consistency_Report:

NAIP 3.75 minute tile file names are based on the USGS quadrangle naming convention.

Completeness_Report: None

Positional Accuracy:

Horizontal_Positional_Accuracy:

Horizontal Positional Accuracy Report: FSA Digital Orthophoto Specs.

Lineage:

Source_Information:

Source Citation:

Citation Information:

Originator: USDA-FSA-APFO Aerial Photography Field Office Geospatial Data Presentation Form: remote-sensing image

Type_of_Source_Media: Digital Linear Tape (DLT) Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar Date: 20070625

Source_Currentness_Reference: Aerial Photography Date for aerial photo source.

Source_Citation_Abbreviation: Georectifed Image Source_Contribution: Digital Georectifed Image.

Process_Step:

Process Description:

Imagery was flown with Leica ADS40 digital sensors to capture 0.9m raw data. Raw data is then downloaded using Leica GPro software into 12 bit TIFF format. The raw TIFF imagery is then georeferenced and reprojected using GPS/INS 200Hz exterior orientation information (x/y/z/o/p/k). Technicians precisely measure ground control and tie points in 3 bands/looks (Back/Nadir/Forward) for each line. The resulting point data, ground control, and orientation data is used to perform a full bundle adjustment. Any blunders are removed, and weak areas are manually supplemented to ensure good coverage of points. Once the point data is cleaned and point coverage is acceptable control points from the prior generation MDOQQ's and source DEM are introduced in the corners and center of the block being adjusted. This control is used to perform any datum shift (x/y/z and rotation) to ensure the new adjusted imagery fits the existing MDOQQ reference imagery. The output from this bundle adjustment process is revised exterior orientation data for the sensor with any GPS/INS, datum, and sensor calibration errors modeled and compensated for. Using this revised EO data orthorectified image strips are created using the USGS DEM. The 10m DEM is used where available and 30m DEM is used elsewhere. The orthorectified strips are overlaid with the existing MDOQQ compressed files to ensure accuracy is met by visual inspection and manually measuring features. Once the accuracy of the orthorectified image strips are validated the strips are processed with a NWG proprietary dodging package that compensates for the bi-directional reflectance function that is caused by the sun's position relative to the image area. This compensated imagery is then imported into Inpho's OrthoVista 4.0 package which is used for the final radiometric balance, mosaic, and DOQQ sheet creation. These final DOQQ sheets contain a 300m minimum buffer. These final DOQQ tiles are edge inspected to the existing MDOQQ sheets for accuracy validation.

Process Date: 20080109

Process_Step:

Process_Description: Dataset copied.

Process_Step:

Process_Description: Dataset copied.

Source Used Citation Abbreviation: I:\Flight\shapefiles\naip az 2007

Spatial_Data_Organization_Information:

Indirect_Spatial_Reference: Cochise County, AZ
Direct_Spatial_Reference_Method: Vector
Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS Point and Vector Object Type: G-polygon

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Raster_Object_Information:
          Raster_Object_Type: Pixel
           Row Count: 1
           Column_Count: 1
Spatial Reference Information:
     Horizontal_Coordinate_System_Definition:
          Planar:
                Grid Coordinate System:
                     Grid_Coordinate_System_Name: Universal Transverse Mercator
                     Universal_Transverse_Mercator:
                           UTM_Zone_Number: 12
                           Transverse_Mercator:
                                Scale_Factor_at_Central_Meridian: 0.999600
                                Longitude of Central Meridian: -111.000000
                                Latitude of Projection Origin: 0.000000
                                False_Easting: 500000.000000
                                False Northing: 0.000000
                Planar_Coordinate_Information:
                     Planar_Coordinate_Encoding_Method: coordinate pair
                     Coordinate_Representation:
                          Abscissa_Resolution: 0.000000
                           Ordinate_Resolution: 0.000000
                     Planar_Distance_Units: meters
           Geodetic_Model:
                Horizontal_Datum_Name: North American Datum of 1983
                Ellipsoid Name: Geodetic Reference System 80
                Semi-major Axis: 6378137.000000
                Denominator of Flattening Ratio: 298.257222
Entity_and_Attribute_Information:
     Detailed Description:
          Entity_Type:
                Entity_Type_Label: NAIP_Metadata
          Attribute:
                Attribute_Label: Shape
                Attribute Definition: Feature geometry.
                Attribute Definition Source: ESRI
                Attribute Domain Values:
                     Unrepresentable Domain: Coordinates defining the features.
          Attribute:
                Attribute_Label: AREA
          Attribute:
                Attribute_Label: PERIMETER
           Attribute:
```

Point_and_Vector_Object_Count: 7643

Attribute_Label: ST
Attribute:
Attribute_Label: QQNAME
Attribute:
Attribute_Label: QKEY
Attribute:
Attribute_Label: QUADRANT
Attribute:
Attribute_Label: APFONAME
Attribute:
Attribute_Label: GNIS
Attribute:
Attribute_Label: DY
Attribute:
Attribute_Label: MY
Attribute:
Attribute_Label: SY
Attribute:
Attribute_Label: DX
Attribute:
Attribute_Label: MX
Attribute:
Attribute_Label: SX
Attribute:
Attribute_Label: OLAT
Attribute:
Attribute_Label: OLONG
Attribute:
Attribute_Label: FileName
Attribute:
Attribute_Label: ArcKey
Attribute:
Attribute_Label: USGSID
Attribute:
Attribute_Label: Qdrnt
Attribute:
Attribute_Label: UTM

Attribute:

Attribute_Label: Res

Attribute:

Attribute_Label: SrcImgDate

Attribute:

Attribute_Label: VerDate

Attribute:

Attribute_Label: Shape_Area
Attribute Definition: Area of feature in internal units squared.

Attribute_Definition_Source: ESRI

Attribute_Domain_Values:

Unrepresentable_Domain: Positive real numbers that are automatically generated.

Attribute:

Attribute Label: Band

Attribute:

Attribute Label: FID

Attribute_Definition: Internal feature number.

Attribute Definition Source: ESRI

Attribute Domain Values:

Unrepresentable Domain:

Sequential unique whole numbers that are automatically generated.

Attribute:

Attribute_Label: Shape_Leng

Overview_Description:

Entity_and_Attribute_Overview: 32-bit pixels, 4 band color(RGBIR) values 0 - 255

Entity_and_Attribute_Detail_Citation: None

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact Person: Supervisor Customer Services Section

Contact_Organization: USDA-FSA-APFO Aerial Photography Field Office

Contact_Address:

Address Type: mailing and physical address

Address: 2222 West 2300 South

City: Salt Lake City State_or_Province: Utah Postal_Code: 84119-2020

Country: USA

Contact_Voice_Telephone: 801-844-2922 Contact_Facsimile_Telephone: 801-956-3653

Contact Electronic Mail Address: apfo.sales@slc.usda.gov

Resource Description: Downloadable Data

Distribution_Liability:

In no event shall the creators, custodians, or distributors of this information be liable for any damages arising out of its use (or the inability to use it).

Standard Order Process:

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Digital_Form:
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Digital_Transfer_Information:

Format_Name: GeoTIFF - Georeferenced Tagged Image File Format Format_Information_Content: Multispectral 4-band Transfer_Size: 0.991

Digital_Transfer_Option:

Offline_Option:

Offline_Media: CD-ROM
Recording Format: ISO 9660 Mode 1 Level 2 Extensions

Fees:

Contact the Aerial Photography Field Office for more information

Metadata_Reference_Information:

Metadata_Date: 20081107 Metadata_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: USDA-FSA-APFO Aerial Photography Field Office

Contact Address:

Address_Type: mailing and physical address Address: 2222 West 2300 South City: Salt Lake City State_or_Province: Utah

Postal_Code: 84119-2020

Country: USA

Contact_Voice_Telephone: 801-844-2922

Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Metadata_Time_Convention: local time

Metadata_Extensions:

Online_Linkage: http://www.esri.com/metadata/esriprof80.html

Profile_Name: ESRI Metadata Profile

Generated by mp version 2.9.6 on Fri Nov 07 11:26:12 2008